

**VERSIONS WITH MARKS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

Kindly cancel Claims 1 through 18, without prejudice, and add new Claims 19 through 23, as set forth below.

19 (New). An identity authentication device having the general shape of a stylus, the stylus having a stylus tip, the identity authentication device comprising:

a sensor disposed within the grip of the stylus, the sensor enabling the capture of either but not both of a fingerprint or a thumbprint as the stylus is generating text images upon a surface, either the fingerprint or thumbprint enabling identity authentication of the person doing the writing, the text images being a signature or non-signature images; and

a processor having memory, processor memory being disposed with the stylus, the stylus including means for determining the position of the tip of the stylus upon the surface, the text images being captured in processor memory as the writing is generated by the stylus, the processor memory retaining the text images generated by the stylus upon the surface;

whereby identity authentication is based upon a comparison of either the captured fingerprint or thumbprint against a reference print, such identity authentication being independent of the text images; and

whereby the text images generated by the stylus are downloadable from the scanned text images retained in the processor memory within the stylus.

20 (New). An identity authentication device having the general shape of a stylus, the identity authentication device comprising:

a sensor enabling the capture of a fingerprint or a thumbprint as the stylus is generating text images upon a surface, the fingerprint or thumbprint enabling identity authentication of a person doing the writing, the text images being a signature or non-signature images; and

a processor having memory, processor memory being disposed with the stylus, the stylus including a scanner-type device, the scanner-type device for scanning text images generated by the stylus upon the surface, all of the text images being captured in processor memory as the writing is generated by the stylus, the processor memory retaining the text images generated by the stylus upon the surface;

whereby identity authentication is based upon a comparison of either the captured fingerprint or thumbprint against a reference print, such identity authentication being independent of the text images.

21 (New). The identity authentication device of Claim 20, wherein the text images generated by the stylus are downloadable from the scanned text images retained in the processor memory within the stylus.

22 (New). An identity authentication device having the general shape of a stylus, the stylus having a stylus tip, the identity authentication device comprising:

a sensor enabling the capture of a fingerprint or a thumbprint as the stylus is generating text images upon a writing surface, the fingerprint or thumbprint enabling identity authentication of the person doing the writing, the text images being a signature or non-signature images;; and

a processor having memory, processor memory being disposed with the stylus, the processor tracking the position of the stylus tip as the text images are being

generated upon the writing surface, the position of the stylus tip relative to the surface being tracked by infrared emissions received by the stylus and stored in the processor memory as the writing is generated by the stylus;

whereby identity authentication is based upon a comparison of the captured fingerprint or thumbprint against a reference print, such identity authentication being independent of the text images.

23 (New). The identity authentication device of Claim 22, wherein the text images generated by the stylus are downloadable from the scanned text images retained in the processor memory within the stylus.